PS-LX430/430C/431/431N/433

SERVICE MANUAL



PS-LX430:

US Model

PS-LX430C:

US Model

Canadian Model

PS-LX431:

AEP Model

UK Model E Model

PS-LX431N:

US Model

PS-LX433:

US Model

SPECIFICATIONS

Turntable Platter

30.0 cm(12 in.), aluminum-alloy diecast

Motor DC servo motor Drive system Belt drive

Control system DC servo control system

Speed 331/3 rpm, 45 rpm

Start-up time

Comes to nominal speed within 1/2 rotation (331/3

Wow and flutter 0.045% (WRMS)

Signal-to-noise ratio 70 dB (DIN-B)

Automatic system

Lead-in, return, reject, repeat, record size

Suspension system

High elasticity gel insulator

Tonearm

PS-LX430/430C/433:

Type Statically balanced

Pivot-to-stylus length

216.5 mm (8¹/₂ in.) Usable cartridge

Plug-in type, 6 g Sony VL-45G

Tracking error

PS-LX431/431N:

Type Dynamically balanced

Pivot-to-stylus length 216.5 mm (81/2 in.)

Overhang 16.5 mm (22/32 in.)

Tracking error

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK NO THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. Cartridge

PS-LX430C: VL-45G

Type Moving magnet type

Frequency response

20 Hz to 20 kHz

Channel separation

20dB at 1 kHz

3.5 mV at 1 kHz, 5 cm/sec. Output voltage 50 to 100 kilohms Load impedance

Tracking force 1.25 g

Stylus Sony ND-145G (conical 0.6 mil diamond)

Weight 6 g

PS-LX430/LX433 Not supplied

PS-LX431: VL-42G

Type

Frequency response 20 Hz t0 20 kHz 16dB at 1 kHz Channel separation

Output voltage 2.5 mV at 1 kHz, 5 cm/sec.

Load impedance 50 to 100 kilohms

Tracking force

Sonv ND-142G Stylus

(conical 0.6 mil diamond)

Moving magnet type

Weight

-Continued on page 2-

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE / SUR LES DIAGRAMMES SCHÉ-MATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REM-PLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY

STEREO TURNTABLE SYSTEM SONY



PS-LX430/430C/431/431N/433

General

Power requirements

US, Canadian model: 120 V ac, 60 Hz AEP model: 220 V ac, 50/60 Hz UK model: 240 V ac, 50/60 Hz

Power consumption Dimensions

PS-LX430/430C/431/433:

Approx. $430 \times 100 \times 360 \,\text{mm} \,(\text{w/h/d})$

(17 x 4 x 141/4 inches)

incl. projecting parts and controls

PS-LX431N:

Approx. $430 \times 110 \times 360 \text{ mm (w/h/d)}$

(17 x 4 3/8 x 14 in.)

including projecting parts and controls

Weight

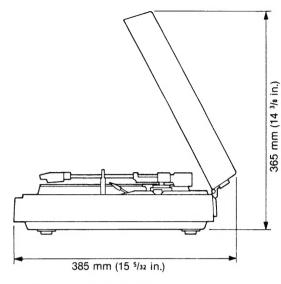
PS-LX430/430C/431/433:

Approx. 3.5 kg (7 lbs 12 oz), net Approx. 4.5 kg (9 lbs 10 oz), in shipping

carton

PS-LX431N:

Approx. 2.9 kg (6 lb 7 oz) net

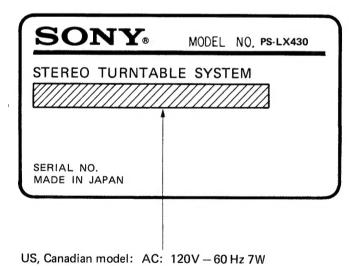


(PS-LX431N: Dust cover is not supplied)

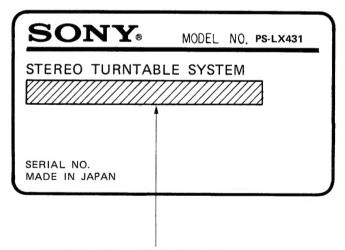
MODEL IDENTIFICATION

- Specification Label -

PS-LX430, PS-LX430C, PS-LX433



PS-LX431, PS-LX431N



US model: AC: 120V - 60 Hz 7W AEP, UK model: AC: 220V - 50/60 Hz 7W

E model: AC: 110 - 220V, 220 - 240V 50/60 Hz 7W,

SAFETY CHECK-OUT (US Model)

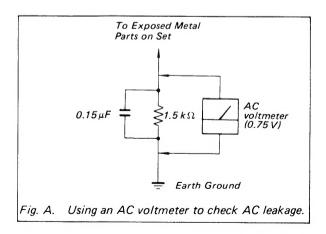
After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

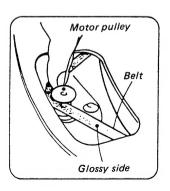
The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
- A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
- 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

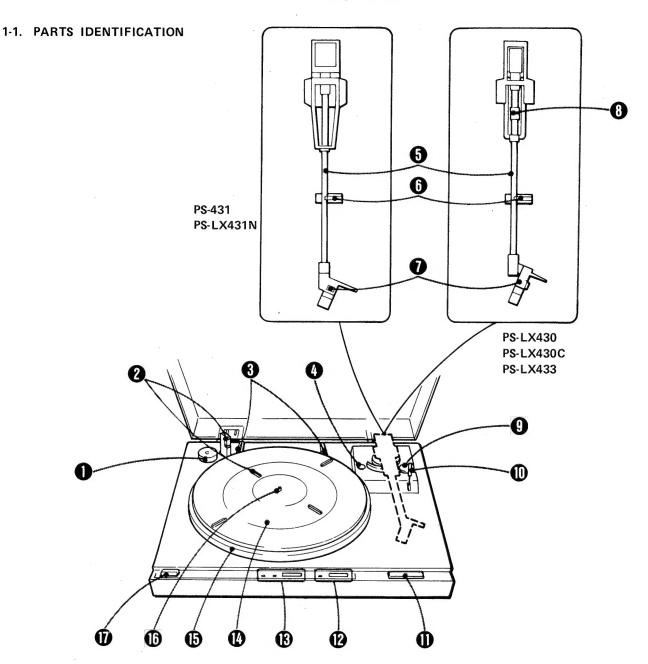


CAUTION ON INSTALLING BELT

When installing belt, glossy should be faced outside.



SECTION 1 OUTLINE



- **45-rpm** adaptor
- 2 Auto-record-size selection holes and lamp
- O Disc centering guides
- Orop point adjustment hole
- **6** Tonearm
- Arm rest
- ◆ Cartridge (not supplied with US, Canadian certain models of PS-LX430/LX433)
- Sub-weight

ANTI-SKATING compensator

Normally, set it at the center position. If the stylus is driven inward when the tone arm is lowered to the leadin groove, turn the ANTI-SKATING compensator to \oplus . If the stylus is driven outward, turn the ANTI-SKATING compensator to \ominus .



Center position

▼/▼ (cueing) lever

Used to lift or lower the tonearm.

1 START/STOP button

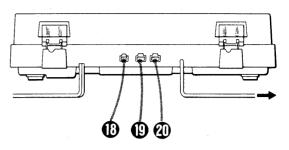
P REPEAT button and indicator

SPEED selector and indicators

Set the SPEED selector according to the speed of the record to be played. For 45-rpm records, depress the selector when a 45 rpm record is to be played. For a 33¹/₃ records, press it again.

Rubber mat

- (B) Turntable platter
- (1) Center spindle
- **1** POWER switch



® SYNC connector

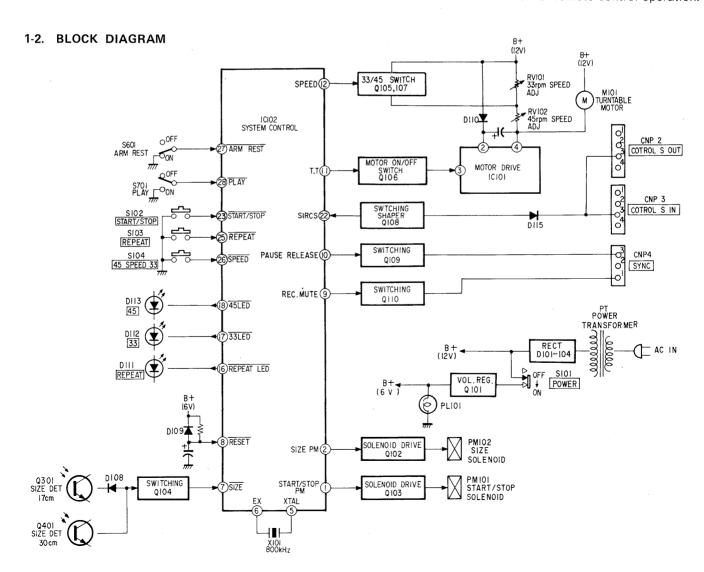
Connect to the SYNC connector of the optional Sony tape deck equipped with a 3-pin flat connector.

(CONTROL S IN connector

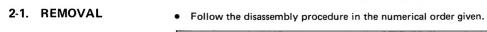
Connect to the CONTROL S OUT or REMOTE OUT connector of an optional Sony system control tuner or receiver for whole audio system remote control.

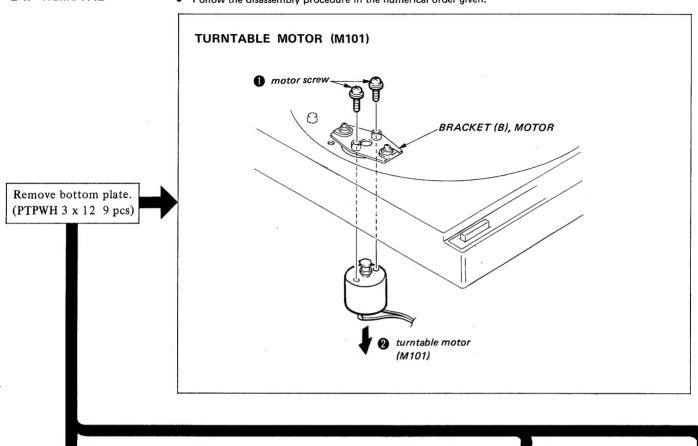
@ CONTROL S OUT connector

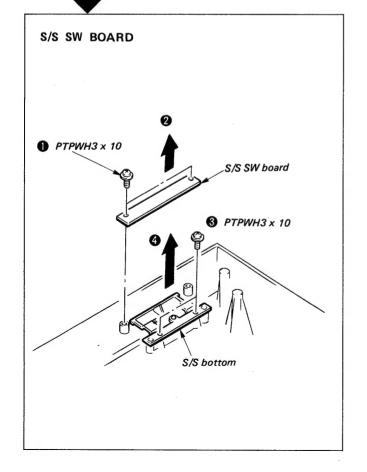
Connect to the CONTROL S IN or REMOTE OUT connector of Sony audio equipment equipped with a 4-pin remote control connector for remote control operation.

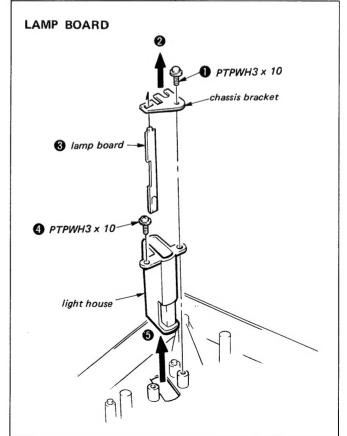


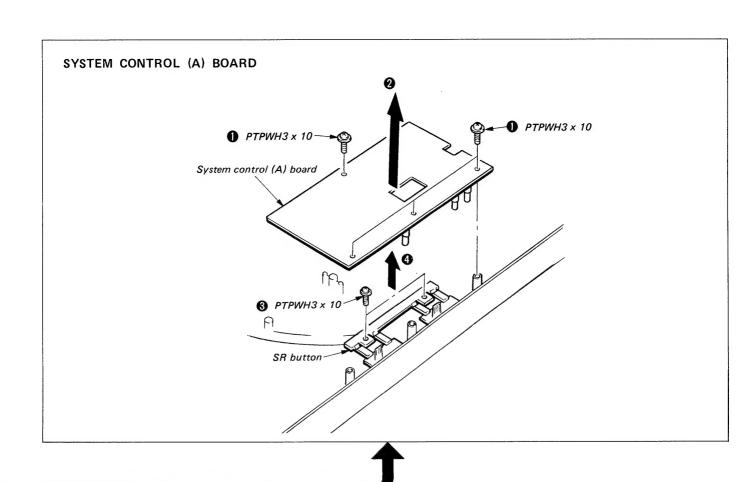
SECTION 2 DISASSEMBLY

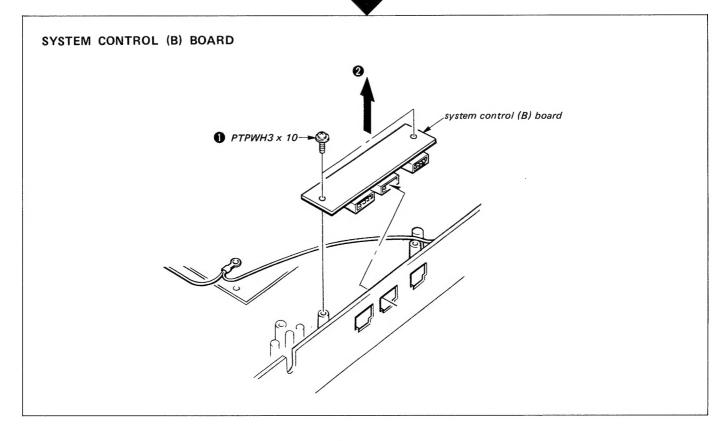




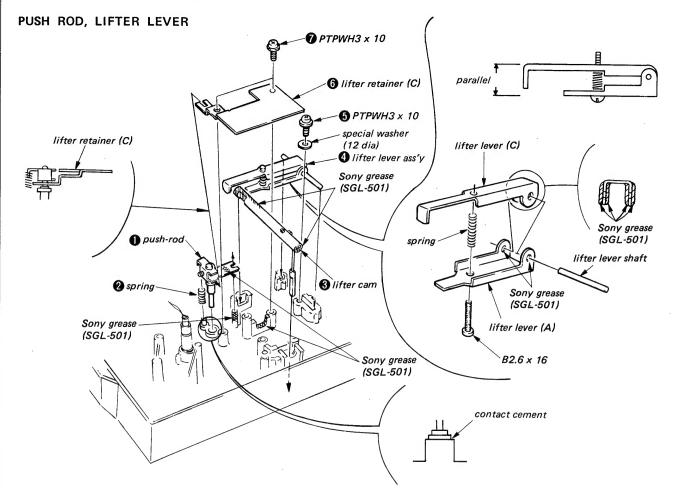








2-2. INSTALLATION

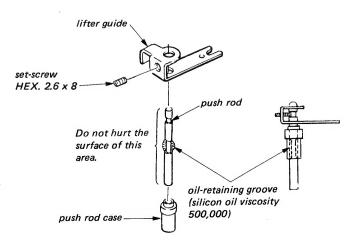


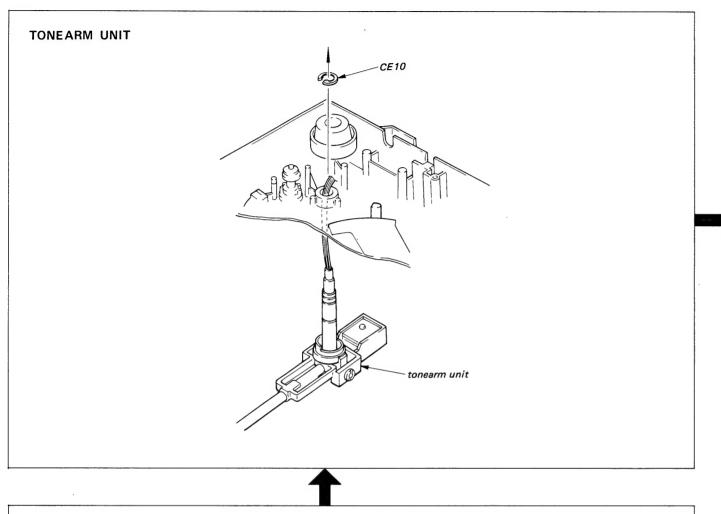
Caution for installation:

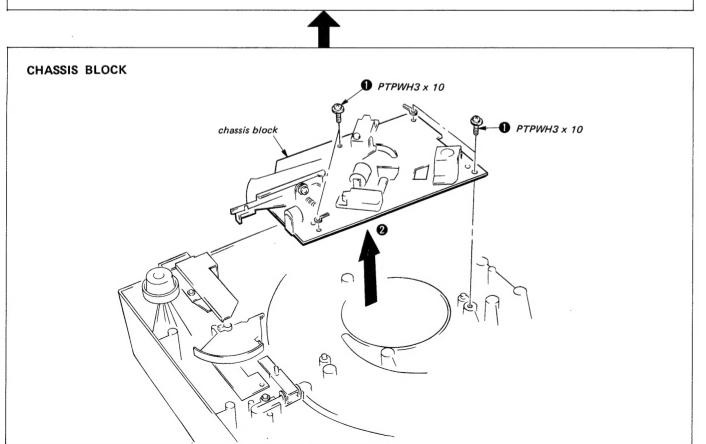
When the push rod is replaced, apply silicon oil (viscosity: 500,000 cs) to the push rod as illustrated below.

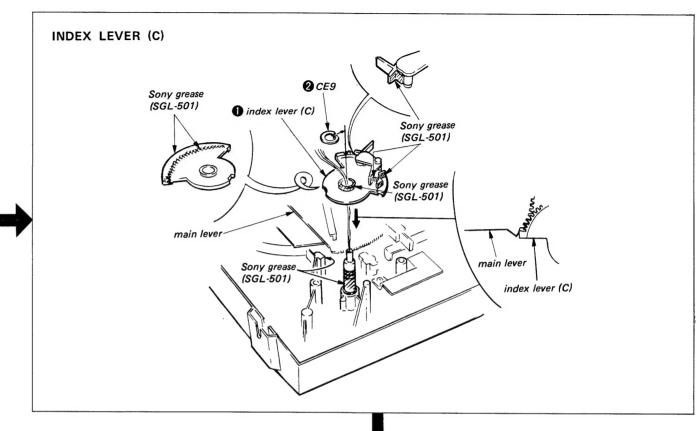
Caution:

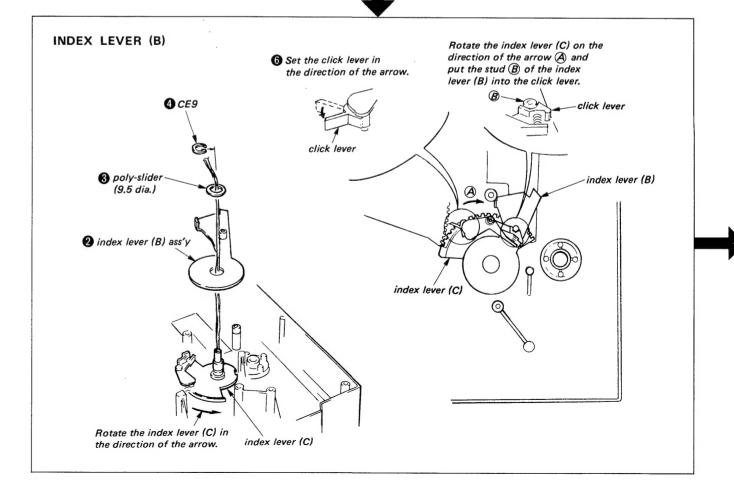
When lubricating, rotate and move the push rod up and down a few times.

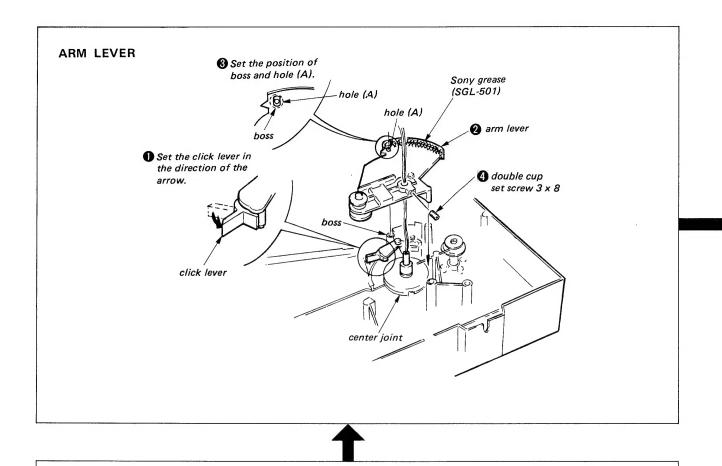


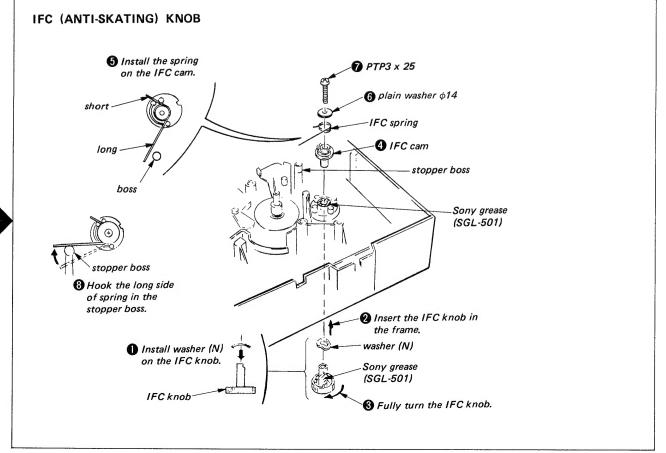


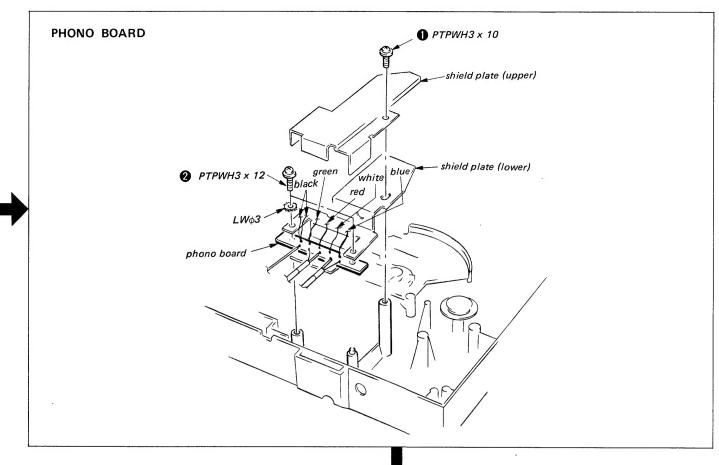


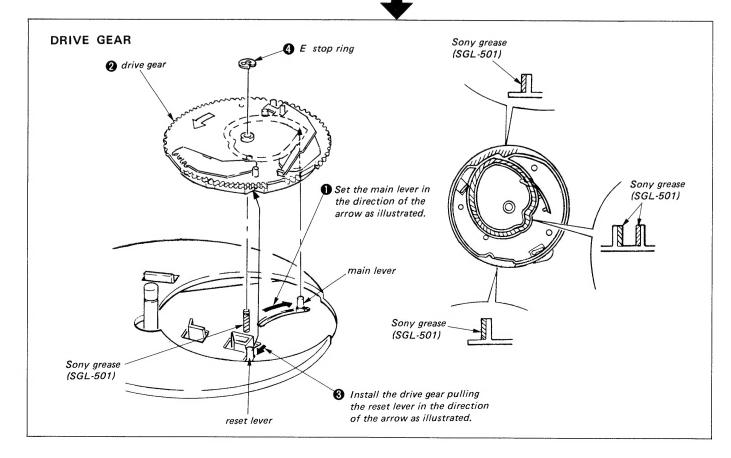








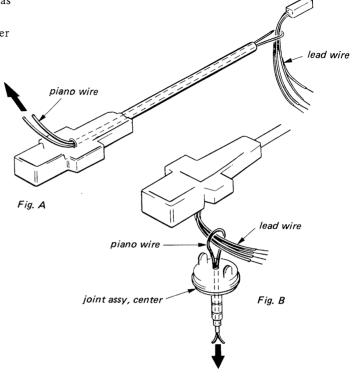




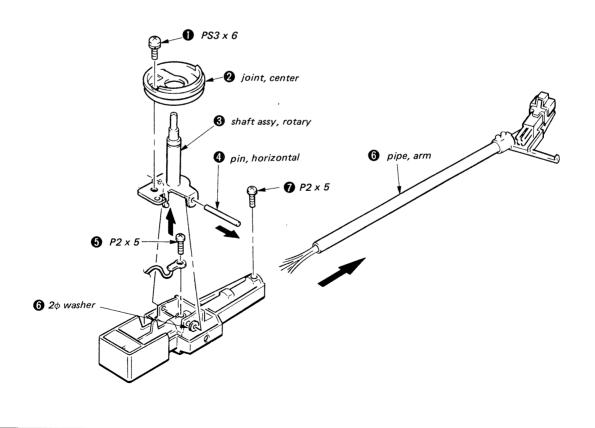
TONEARM (PS-LX431)

1. LEAD WIRE INSTALLATION

- 1-1. Pass piano wire with lead wires through pipe as shown in Fig. A.
- 1-2. Pass piano wire with lead wires through center joint assy as shown in Fig. B.



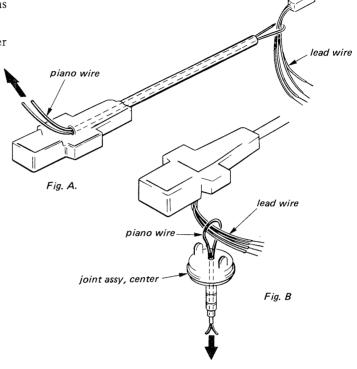
2. ARM PIPE REMOVAL



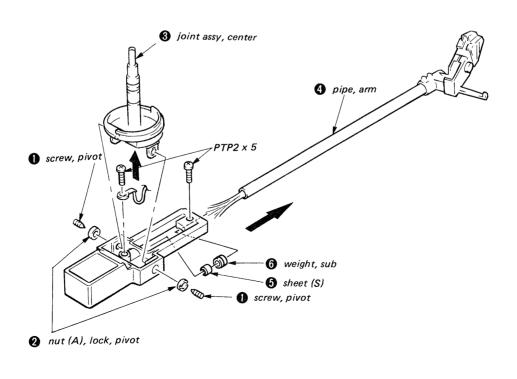
TONEARM (PS-LX430, 433)

1. LEAD WIRE INSTALLATION

- 1-1. Pass piano wire with lead wires through pipe as shown in Fig. A.
- 1-2. Pass piano wire with lead wires through center joint assy as shown in Fig. B.

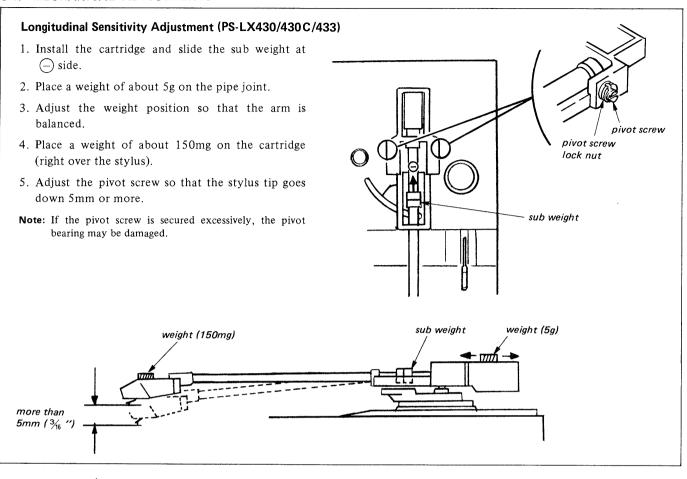


2. ARM PIPE REMOVAL



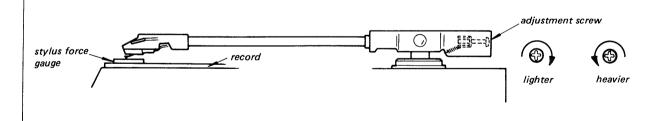
SECTION 3 ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS



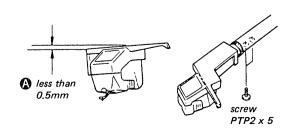
Stylus Force Adjustment (PS-LX431)

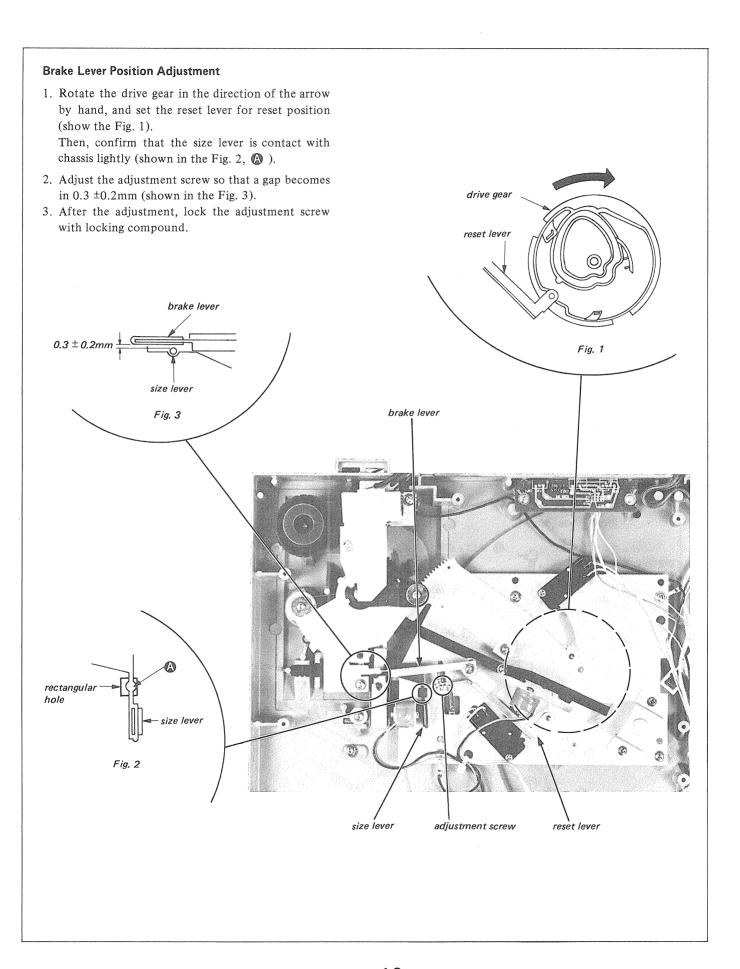
- 1. Turn the adjustment screw to obtain zero balance.
- 2. Turn the adjustment screw again so that the stylus force becomes 2g on the stylus force gauge.



Shell's Horizontal Balance Adjustment

Loosen the neck cylinder screw and adjust so that section (A) (shell slant) is less than 0.5mm.





Stylus Height Adjustment

Note: Perform both adjustment for manual and automatic operations.

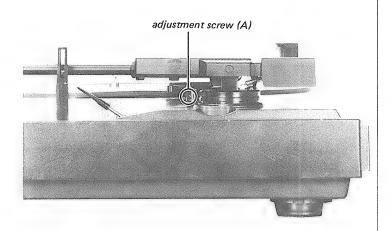
1. Automatic

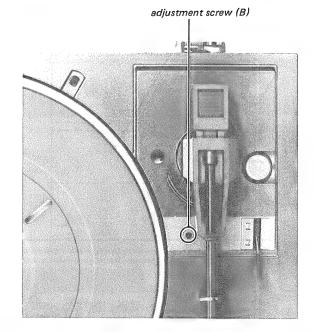
- 1) Put a test record on the mat.
- Depress the lifter lever to make a lifterdown mode.
- 3) Move the tonearm to out of groove at record by hand.
- 4) Rotate the turntable by hand and at make tonearm lead-in.
- 5) Move the tonearm to out of groove of record by hand again.
- 6) Rotate the turntable by hand and make the tonearm.
- 7) Then, loosen the adjustment screw (A) and adjust the height of the tonearm lifter so that the stylus height becomes in 4-8mm.
- 8) Rotate the turntable by hand slowly and move the tonearm to the most outer groove of record.
- 9) Confirm that stylus height becomes in 4-8mm.

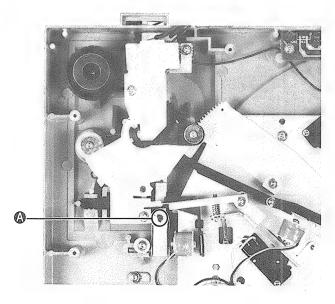
2. Manual

- 1) Put a test record on the mat.
- 2) Move the tonearm to out of groove of record by hand.
- 3) Rotate the turntable by hand and make the tonearm lead-in.
- 4) Raise the lifter lever to make a lifter-up mode.
- 5) Move the tonearm until most outer groove of record by hand.
- 6) Adjust the adjustment screw (B) so that the stylus height becomes in 4-8mm.
- 7) Move the tonearm to the out of groove of record by hand.
 - Confirm that stylus height becomes in 4-8mm.
- 8) Rotate the turntable by hand and return the tonearm to arm rest.
- 9) After the adjustment, lock the portion (a) with suitable locking compound.
- Note: Stylus height difference should be within 2mm, between automatic and manual operation.

 When the arm returns.
 - The tonearm should be not contact with the top part of the rest when the tonearm returns.





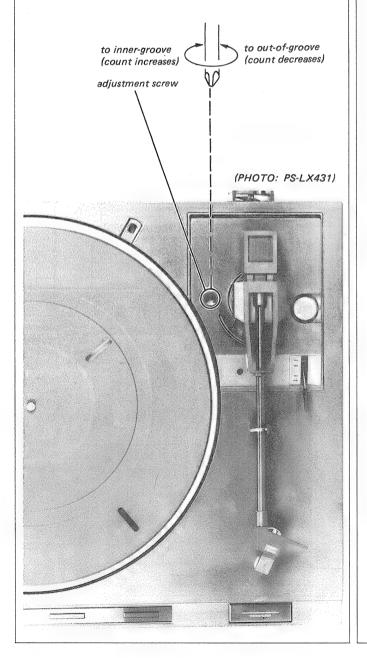


Stylus Drop-point Adjustment

Note: Stylus force adjustment should be completed.

- 1. Put a test record YFSC-16 on the mat.
- 2. Set the SPEED switch to 33.
- 3. Press the START/STOP button.
- 4. By using a screwdriver, turn the adjustment screw so that the stylus tip drops on the record at the 4-16 counts position.

Note: The proper adjustment for a 30cm record is also correct for a 17cm record.

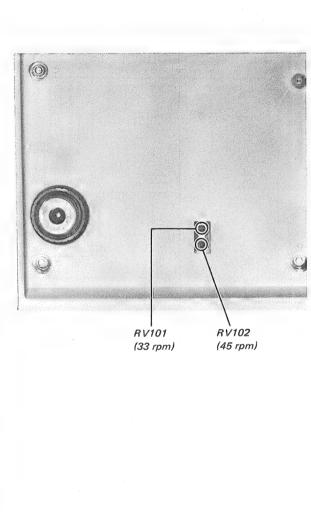


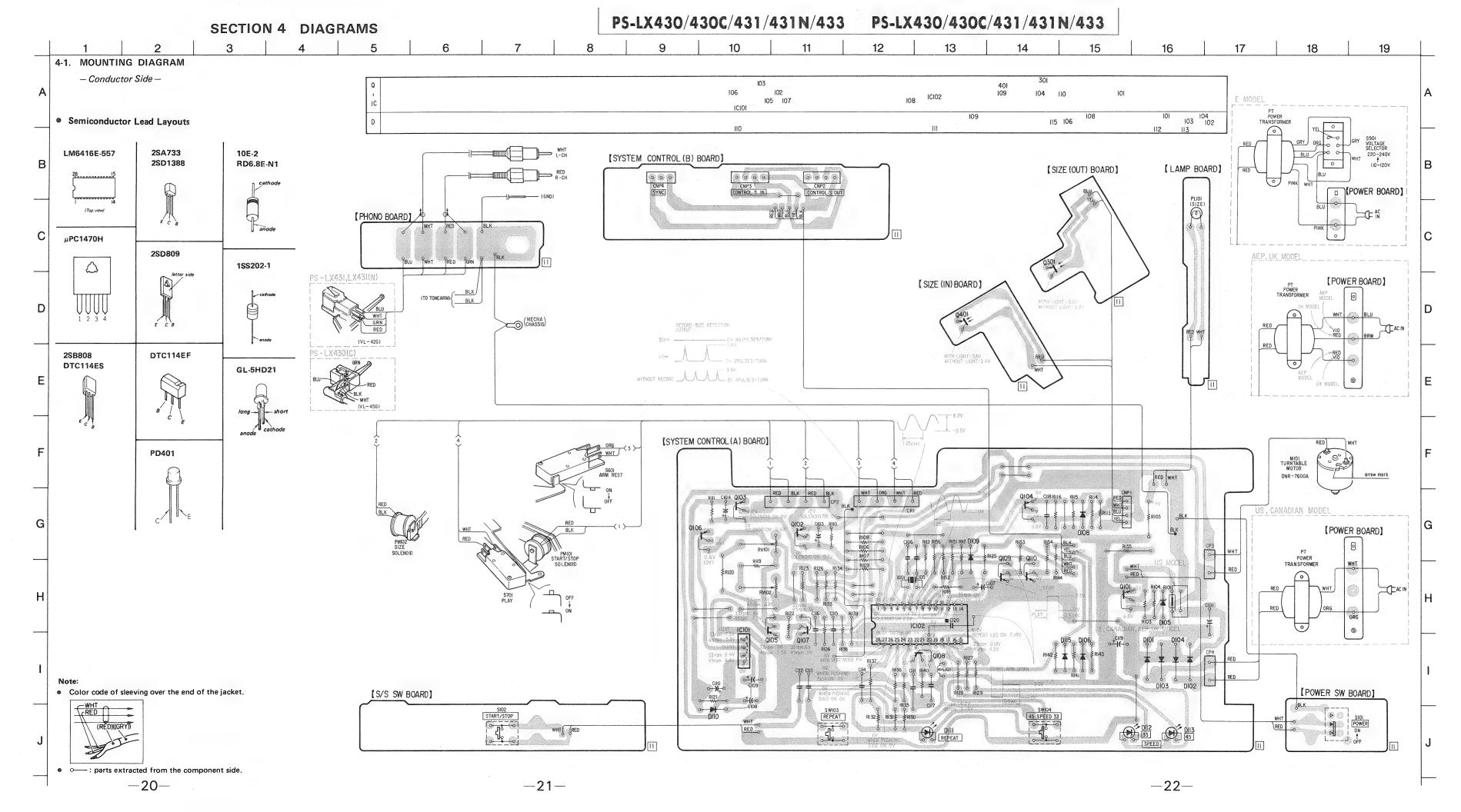
3-2. ELECTRICAL ADJUSTMENT

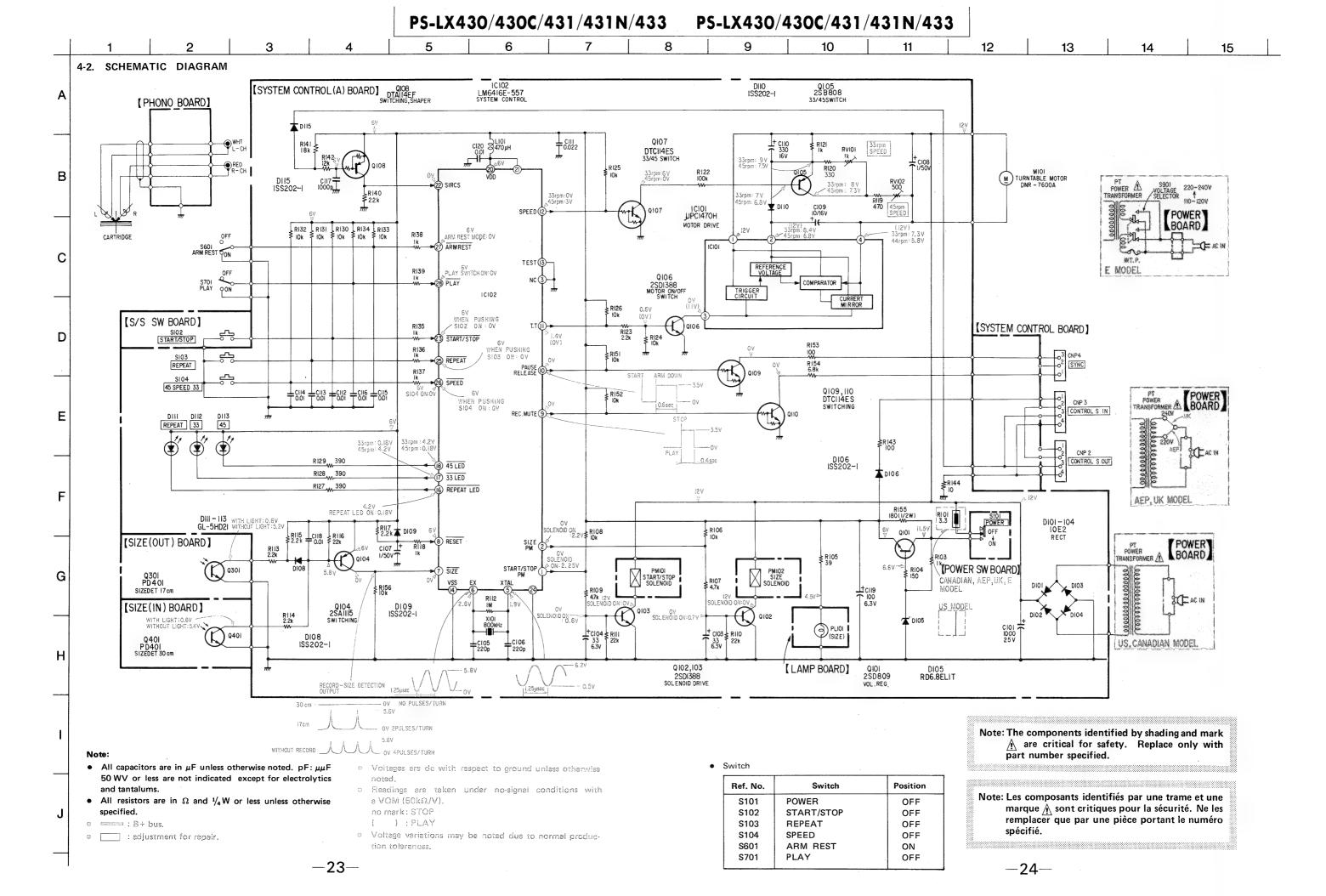
Speed Adjustment

Note: Be sure to perform 45rpm adjustment before 33rpm.

- 1. Put a stroboscope board on the mat.
- Set the SPEED switch to 45.
 Press the START/STOP button.
 Adjust RV102 so that the stripped pattern of stroboscope board is stationary.
- 3. Set the SPEED switch to 33. Adjust RV101 in the same way.

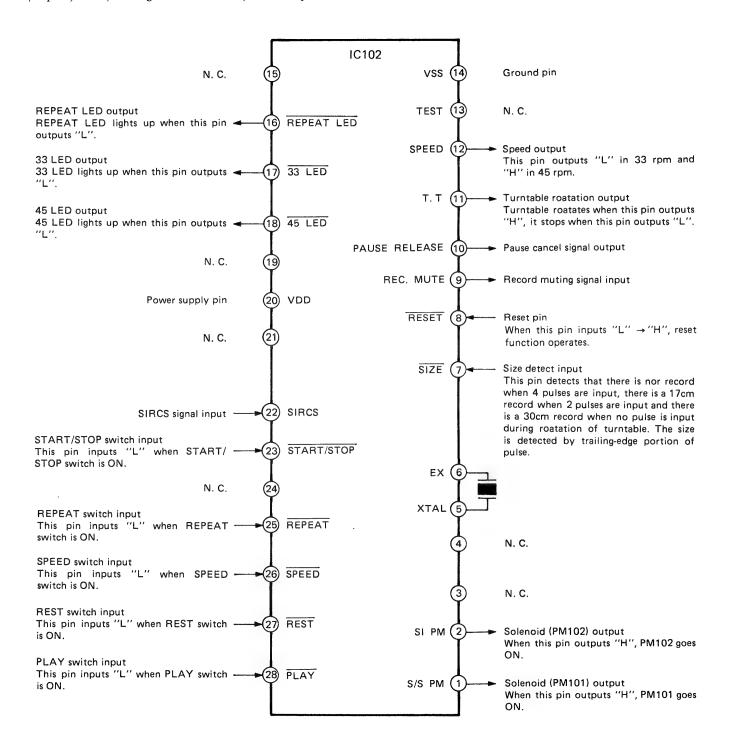






[IC102 (LM6416E-557) PIN FUNCTIONS]

IC102 (LM6416E-557) is an N-MOS 4 bit micro-computer for control integrating ROM, RAM, ALU, I/O port, timer, clock generator and etc., into 1-chip.



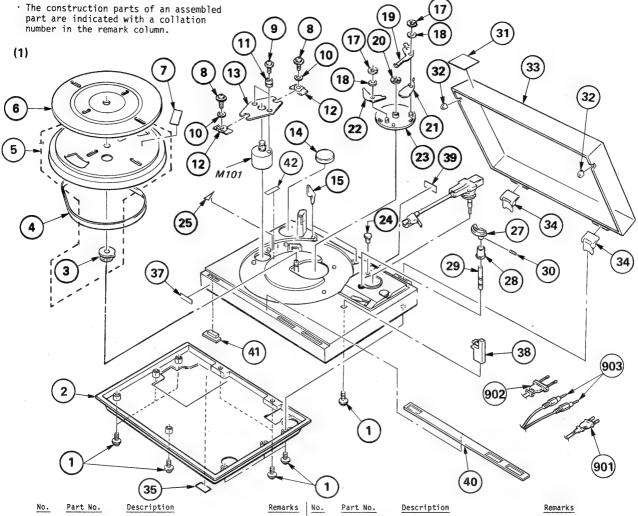
SECTION 5 EXPLODED VIEWS AND PARTS LIST

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark $\underline{\mathbb{A}}$ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque A sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



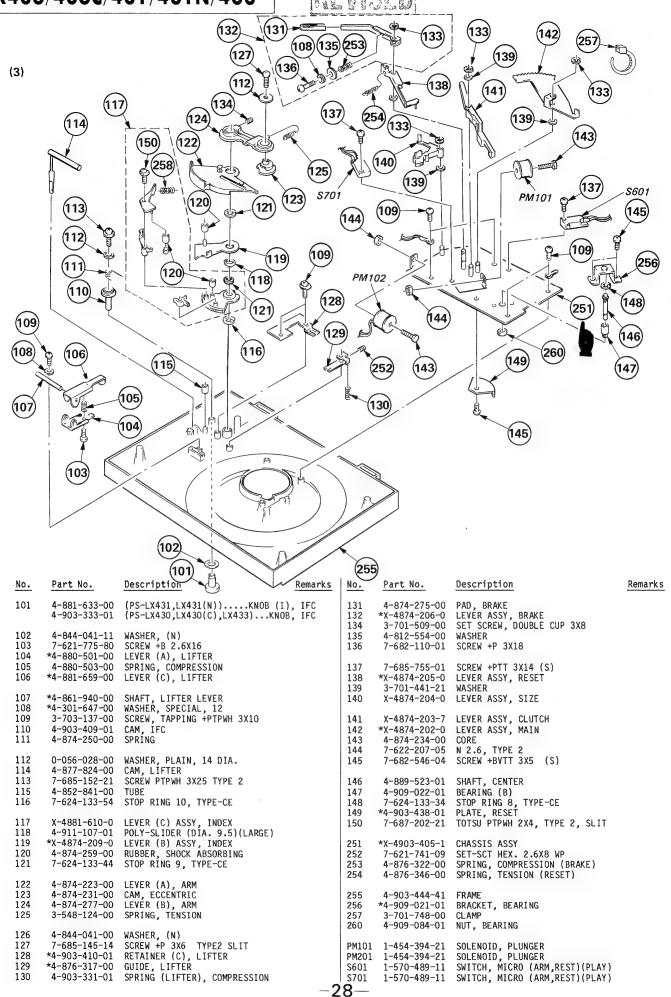
No.	Part No.	Description	Remark
1 2	3-703-136-00 4-889-532-01 4-889-532-11	SCREW, TAPPING +PTPWH 3X12 (PS-LX431:AEP,UK,E)PLATE, BOT (PS-LX430,LX430(C),LX431(N),	
3 4 5	4-868-052-00 4-880-655-01 X-4881-615-1	LX433:US,Canadian)PLATE, GEAR, CENTER BELT TURNTABLE ASSY	BOILOW
6	4-903-470-01	(PS-LX430(C),LX431:Canadian,AEP,	
	4-903-470-11	SHEET, TUR (PS-LX430,LX430(C),LX431(N),LX43 SHEET, TUR	3:US)
7 8 9 10 11 12 13	*4-909-004-01 3-703-137-00 4-909-062-01 *4-301-647-00 4-909-061-01 4-908-120-01 *4-908-151-01	LABEL, CAUTION, GEAR SCREW, TAPPING +PTPWH 3X10 SCREW, MOTOR WASHER, SPECIAL, 12 CUSHION, MOTOR RUBBER, FLOATING BRACKET (C), MOTOR	
14	3-701-806-00	(PS-LX430,LX430(C),LX431,LX433)	E /E\
15	4-874-262-00	ADAPTOR, 4 (PS-LX430,LX430(C),LX431,LX433)GUIDE, REC	
17 18 19 20 21 22	7-624-190-81 7-623-105-15 4-874-254-00 7-624-106-04 4-874-232-00 4-874-279-00	STOP RING 2, TYPE-CS W 2, MIDDLE CLUTCH (S) STOP RING 3.0, TYPE -E CLUTCH (R) CLUTCH (L)	
23 24 25 27	4-880-524-00 4-874-260-11 3-703-680-00 X-4903-302-1	GEAR (S), DRIVE CAP, BLIND (US)LABEL, CAUTION, SUB, NEW PLATE ASSY, UP AND DOWN	UL

\cdot	/		
No.	Part No.	Description	Remarks
28 29	*4-874-218-00 4-881-688-00	CASE, PUSH ROD ROD. PUSH	
30	7-621-738-08	SET-SCT. HEX. 2.6X4. FLAT POINT	
31	3-703-705-41	STICKER, SONY SYMBOL (30)	
32	4-876-304-00	(PS-LX430,430(C),LX431,LX433)CUSHION, [OUST COVER
33	X-4903-415-1	(PS-LX430,LX430(C),LX431:SMOKED) ASSY, DUST
:	X-4903-417-1	(PS-LX433:TRANSPARENCY)COVER	
34	4-857-653-00	(PS-LX430,430(C),LX431,LX433)HINGE, DUST	r cover
35	4-876-344-00	(AEP,UK)LABEL, CAUTION POWER	CORD
37	3-701-690-00	(UK)LABEL (MADE IN JAPAN)	
38	X-4874-212-X	REST ASSY, ARM	
39	4-903-456-01	(PS-LX431:UK)LABEL, MODEL	
	4-903-457-01	(PS-LX431:AEP)LABEL, MODEL	NUMBER
	*4-903-459-01	(PS-LX430,LX430(C):US,Canadian)LABEL, MODEL	NUMBER
	4-903-460-01	(PS-LX433:US)LABEL, MODEL	
	4-903-472-01	(PS-LX431(N):US)LABEL, MODEL	
	4-903-458-01	(PS-LX431:E)LABEL, MODEL	
40	4-903-440-41	(PS-LX431(N))PANEL, CONTROL	
	4-903-440-51	(PS-LX431)PANEL, CONTROL	
	4-903-440-61	(PS-LX430,LX430(C))PANEL, CO	ITROL
	4-903-440-71	(PS-LX433)PANEL, CONTROL	
41	4-875-501-00	GUIDE, POWER KNOB	
42	*4-881-683-01	(E)LABEL, VOLTAGE	
	.1-551-506-XX	(US,Canadian)CORD, POWER	
	.1-556-562-00	(UK)CORD, POWER	
200	-1-551-472-23	(E)CORD, POWER	
902 /	.1-551-908-11 1-551-294-00	(AEP)CORD, POWER, EULO PLUG CORD (WITH PLUG)	
M101	8-835-126-01	MOTOR, DC (DNR-7600A)	
.1101	0 000 120 01	north, be (blick routh)	

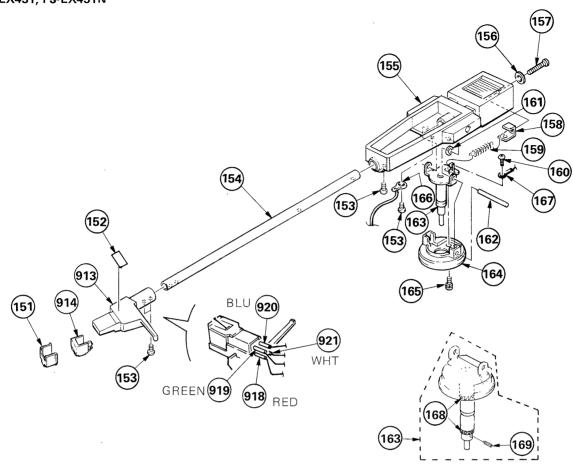
une trame et une marque A sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

(2) 53 63 908 (53 906 (66) 53 **53 60** (910) (53) 59 D111 D112 D113 53 61 67 68 58 918 53 **69**) (57 53 907 S901 (57) (55) (56 56) (53) (53) (904) 54 905 (53) (912) (52 The components identified by shading and mark \underline{A} are critical for safety. Replace only with part number specified. Les composants identifiés par

No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
	-						
51	4-903-436-11	BUTTON, POWER		68	3-703-136-00	SCREW. TAPPING +PTPWH 3X12	
52	*4-903-437-01	BRACKET, SWITCH		69	7-623-422-07	LW 3. TYPE B	
53	3-703-137-00	SCREW, TAPPING +PTPWH 3X10		904	*1-615-858-11	PC BÓARD, POWER SW	
54	7-621-775-00	SCREW +B 2.6X4		905	*1-615-857-11	PC BOARD. S/S SW	
55	4-903-441-11	BUTTON (S.S)					
				906	*A-4619-269-A	(PS-LX430,LX430(C),LX431(N),LX43	33:US)
56	X-4903-301-1	INSULATOR ASSY				(PS-LX430(C)Canadian)	•
57	3-703-136-00	SCREW, TAPPING +PTPWH 3X12				MOUNTED PCB, SYSTEM	1 CONTROL
58	*4-903-450-01	PLATE (P), SHIELD			A-4619-271-A	(PS-LX431:AEP.UK)	
59	*4-901-657-00	SPACER (A), LED				MOUNTED PCB. SYSTEM	1 CONTROL
60	4-903-443-01	BUTTON (SR)					
				907	*1-615-860-11	PC BOARD, PHONO	
61	*4-889-526-01	PLATE (UPPER), SHIELD		908	*1-615-863-11	PC BOARD, SIZE (IN)	
62	*4-889-524-01	PLATE (LOWER), SHIELD		909	*1-615-862-11	PC BOARD, SIZE (OUT)	
63	7-685-750-04	SCREW +PTT 3X5 (S)		910	*1-615-859-11	PC BOARD, LAMP	
64	*4-903-454-01	BRACKET (B), SENSOR		912	*1-615-861-11	PC BOARD, POWER	
66	*4-874-255-00	BRACKET, CHASSIS		\$901/	.1-552-535-00	(E)SWITCH, VOLTAGE SELECT	
67	X-4874-213-7	HOUSE ASSY, LIGHT			.1-448-195-11	(US, Canadian) TRANSFORMER, POW	IER .
					.1-448-196-11	(AEP, UK)TRANSFORMER, POW	
				PT A	.1-448-425-11		



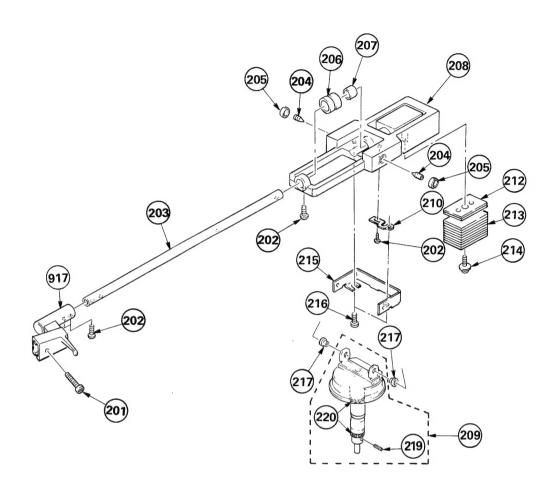
(4) PS-LX431, PS-LX431N



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
151 152 153 154 155 156 157	3-706-613-00 3-706-612-00 7-685-103-2 4-889-528-11 4-889-529-11 7-688-003-13 7-682-555-09	PROTECTOR LABEL, CARTRIDGE SCREW +P 2X5 TYPE2 SLIT PIPE, ARM JOINT, PIPE W 3, MIDDLE SCREW +B 3X30		163 164 165 166 167 168 169	X-4881-614-0 4-880-631-11 7-682-647-01 7-623-505-01 7-623-508-01 7-671-151-01 7-621-712-17	ROTOR ASSY JOINT, CENTER SCREW +PS 3X6 LUG, 2 LUG, 3 STAINLESS, BALL 1/16INCH SET-SCREW, SLOT 2.6X2 CUP POINT	
158 159 160 161 162	4-868-016-01 4-889-510-00 7-682-545-09 3-701-437-01 4-880-619-00	HOOK, SPRING SPRING, TENSION SCREW +B 3X4 WASHER, 2 PIN, HORIZONTAL		913 914 918 919 920 921	1-549-109-21 3-706-614-11 1-557-042-11 1-557-042-21 1-557-042-31 1-557-042-41	CARTRIDGE(WITH SHELL)(VL-42G)151 SHELL (RED)LEAD (WITH TERMINAL) (GRN)LEAD (WITH TERMINAL) (BLU)LEAD (WITH TERMINAL) (WHT)LEAD (WITH TERMINAL)	,152,914

(5) PS-LX430/430C/433

(PS-LX430/LX433: Cartridge is not supplied with US, Canadian certain models)



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
201 202 203 204 205	7-685-103-29 4-903-307-11 2-203-518-61	SCREW (B), CARTRIDGE FITTING SCREW +P 2X5 TYPE2 SLIT PIPE, ARM SCREW, PIVOT NUT (A), LOCK, PIVOT		212 213 214 215 216			
206 207 208 209 210	*4-903-308-01 4-903-336-11 X-4881-611-2	WEIGHT, SUB SHEET (S) JOINT, PIPE JOINT ASSY, CENTER (PS-LX430,LX430(C),LX433:BLACK)PLATE. GROUND		217 219 220 915 917	7-671-151-01 1-549-117-21	BEARING, PIVOT SET-SCREW, SLOT 2.6X2 CUP POINT STAINLESS, BALL 1/16INCH CARTRIDGE (VL-45G) CONNECTOR(WITH HEAD SHELL) 4P	

SECTION 6

ELECTRICAL PARTS LIST

NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS: MF:μF, PF:μμF.

RESISTORS

· All resistors are in ohms.

· F : nonflammable

COILS

· MMH : mH, UH : μΗ

SEMICONDUCTORS

In each case, U : μ, for example: UA...: μA..., UPA...: μPA..., UPC...: μPC, UPD...: μPD... The components identified by shading and mark A are critical for safety.

Replace only with part number specified.

Les composants identifiés par une trame et une marque Asont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

ELECTRICAL PARTS

Ref.No.	Part No.	Description
A	.1-551-506-XX .1-556-562-00 .1-551-472-23	(US,Canadian)CORD, POWER (UK)CORD, POWER (E)CORD, POWER
904	.1-551-908-11 *1-615-858-11 *1-615-857-11	(AEP)CORD, POWER, EULO PLUG PC BOARD, POWER SW PC BOARD, S/S SW
906	*A-4619-269-A	(PS-LX430,LX430(C),LX431(N),LX433:US)
	A-4619-270-A	MOUNTED PCB, SYSTEM CONTRO (PS-LX430(C)Canadian)
	A-4619-271-A	MOUNTED PCB, SYSTEM CONTRO (PS-LX431:AEP,JK) MOUNTED PCB, SYSTEM CONTRO
908	*1-615-860-11 *1-615-863-11 *1-615-862-11	PC BOARD, PHONO PC BOARD, SIZE (IN) PC BOARD, SIZE (OUT)
	*1-615-859-11 *1-615-861-11 1-549-109-21	PC BOARD, LAMP PC BOARD, POWER CARTRIDGE (WITH SHELL)
914 915 917	3-706-614-11 1-549-117-21 *1-562-517-41	SHELL CARTRIDGE (VL-45G) CONNECTOR(WITH HEAD SHELL) 4P
918 919 920	1-557-042-11 1-557-042-21 1-557-042-31	(RED)LEAD (WITH TERMINAL) (GRN)LEAD (WITH TERMINAL) (BLU)LEAD (WITH TERMINAL)
921 923	1-557-042-41 1-551-294-00	(WHT)LEAD (WITH TERMINAL) CORD (WITH PLUG)
C101 C103 C104	1-123-337-00 1-123-646-00 1-123-646-00	ELECT 1000MF 20% 25V ELECT 33MF 20% 6.3V ELECT 33MF 20% 6.3V
C105 C106 C107	1-162-286-31 1-162-286-31 1-123-611-00	CERAMIC 220PF 10% 50V CERAMIC 220PF 10% 50V ELECT 1MF 20% 50V
C108 C109 C110	1-123-611-00 1-123-617-00 1-123-322-00	ELECT 1MF 20% 50V ELECT 10MF 20% 16V ELECT 330MF 20% 16V
C111 C112 C113	1-161-494-00 1-162-306-31 1-162-306-31	CERAMIC 0.022MF 30% 25V CERAMIC 0.01MF 30% 16V CERAMIC 0.01MF 30% 16V
C114 C115 C116	1-162-306-31 1-162-306-31 1-162-306-31	CERAMIC 0.01MF 30% 16V CERAMIC 0.01MF 30% 16V CERAMIC 0.01MF 30% 16V
C117 C118 C119 C120	1-162-294-31 1-162-306-31 1-123-661-00 1-162-306-31	CERAMIC 0.001MF 10% 50V CERAMIC 0.01MF 30% 16V ELECT 220MF 20% 6.3V CERAMIC 0.01MF 30% 16V

ELECTRICAL PARTS

Ref.No. Part No.	Description
CP1 *1-508-801-00	U TYPE BASE POST 4P
CP2 *1-508-801-00	U TYPE BASE POST 4P
CP3 *1-508-799-00	BASE POST (U TYPE)
CP4 *1-508-799-00	BASE POST (U TYPE)
CNP1 *1-564-706-11 CNP2 *1-564-980-11 CNP3 *1-564-980-11 CNP4 1-564-358-00	PIN, CONNECTOR (SMALL TYPE) 4P PIN, CONNECTOR 4P (CONTROL S OUT) PIN, CONNECTOR 4P (CONTROL S IN) PIN, CONNECTOR 3P (SYNC)
D101 8-719-200-02	DIODE 10E2
D102 8-719-200-02	DIODE 10E2
D103 8-719-200-02	DIODE 10E2
D104 8-719-200-02	DIODE 10E2
D105 8-719-102-76	DIODE RD6.8EN1
D106 8-719-107-94	DIODE 1SS202-1
D108 8-719-107-94	DIODE 1SS202-1
D109 8-719-107-94	DIODE 1SS202-1
D110 8-719-107-94	DIODE 1SS202-1
D111 8-719-906-58 D112 8-719-906-58 D113 8-719-906-58 D115 8-719-107-94	DIODE GL-5HD21 DIODE GL-5HD21 DIODE GL-5HD21 DIODE 1SS202-1
IC101 8-759-103-35	IC UPC1470H
IC102 8-759-801-85	IC LM6416E-557
L101 1-407-177-XX	MICRO INDUCTOR 470UH
M101 8-835-126-01	MOTOR, DC (DNR-7600A)
PL101 1-518-268-00	LAMP, PILOT 4.5V 40MA
PM101 1-454-394-21	SOLENOID, PLUNGER
PM201 1-454-394-21	SOLENOID, PLUNGER
PT A.1-448-195-11	(US,Canadian)TRANSFORMER, POWER
PT A.1-448-196-11	(AEP,UK)TRANSFORMER, POWER
PT A.1-448-425-11	(E)TRANSFORMER, POWER
0101 8-729-180-93	TRANSISTOR 2SD809
0102 8-729-802-34	TRANSISTOR 2SD1388
0103 8-729-802-34	TRANSISTOR 2SD1388
Q104 8-729-173-37	TRANSISTOR 2SA733-P
Q105 8-729-800-83	TRANSISTOR 2SB808
Q106 8-729-802-34	TRANSISTOR 2SD1388
Q107 8-729-900-80 Q108 8-729-900-38 Q109 8-729-900-80	TRANSISTOR DTC114ES TRANSISTOR DTA114EF TRANSISTOR DTC114ES
Q110 8-729-900-80 Q301 8-729-902-39 Q401 8-729-902-39	TRANSISTOR DTC114ES TRANSISTOR PD401 TRANSISTOR PD401

ELECTRICAL PARTS

Ref.No.	Part No.	Description				
R101	1-806-883-11	(Canadian,AEF	1K).	THER	MISTOR	(POSITIVE)
R103	1-247-831-00	CARBON	1K	5%	1/6W	
R104	1-247-811-00	CARBON	150	5%	1/6W	
R105	1-247-695-11	CARBON	39	5%	1/4W	
R106	1-249-429-11	CARBON	10K	5%	1/6W	
R107	1-249-425-11	CARBON	4.7K	5%	1/6W	
R108	1-249-429-11	CARBON	10K	5%	1/6W	
R109	1-249-425-11	CARBON	4.7K	5%	1/6W	
R110	1-249-433-11	CARBON	22K	5%	1/6W	
R111	1-249-433-11	CARBON	22K	5%	1/6W	
R112	1-247-903-00	CARBON	1M	5%	1/6W	
R113	1-249-421-11	CARBON	2.2K	5%	1/6W	
R114	1-249-421-11	CARBON	2.2K	5%	1/6W	
R115	1-249-421-11	CARBON	2.2K	5%	1/6W	
R116	1-249-433-11	CARBON	22K	5%	1/6W	
R117	1-249-421-11	CARBON	2.2K	5%	1/6W	
R118	1-247-831-00	CARBON	1K	5%	1/6W	
R119	1-214-721-00	METAL	470	1%	1/4W	
R120	1-214-717-00	METAL	330	1%	1/4W	
R121	1-247-831-00	CARBON	1K	5%	1/6W	
R122	1-247-879-00	CARBON	100K	5%	1/6W	
R123	1-249-421-11	CARBON	2.2K	5%	1/6W	
R124	1-249-429-11	CARBON	10K	5%	1/6W	
R125	1-249-429-11	CARBON	10K	5%	1/6W	
R126	1-249-429-11	CARBON	10K	5%	1/6W	
R127	1-247-821-00	CARBON	390	5%	1/6W	
R128	1-247-821-00	CARBON	390	5%	1/6W	
R129	1-247-821-00	CARBON	390	5%	1/6W	
R130	1-249-429-11	CARBON	10K	5%	1/6W	
R131	1-249-429-11	CARBON	10K	5%	1/6W	
R132	1-249-429-11	CARBON	10K	5%	1/6W	
R133	1-249-429-11	CARBON	10K	5%	1/6W	
R134	1-249-429-11	CARBON	10K	5%	1/6W	
R135 R136 R137	1-247-831-00 1-247-831-00 1-247-831-00	CARBON CARBON CARBON	1K 1K 1K	5% 5%	1/6W 1/6W 1/6W	
R138	1-247-831-00	CARBON	1K	5%	1/6W	
R139	1-247-831-00	CARBON	1K	5%	1/6W	
R140	1-249-433-11	CARBON	22K	5%	1/6W	
R141	1-249-432-11	CARBON	18K	5%	1/6W	
R142	1-247-857-00	CARBON	12K	5%	1/6W	
R143	1-247-807-00	CARBON	100	5%	1/6W	
R144	1-247-783-00	CARBON	10	5%	1/6W	
R151	1-249-429-11	CARBON	10K	5%	1/6W	
R152	1-249-429-11	CARBON	10K	5%	1/6W	
R153	1-247-807-00	CARBON	100	5%	1/6W	
R154	1-247-851-00	CARBON	6.8K	5%	1/6W	
R155	1-247-742-11	CARBON	180	5%	1/2W	
R156	1-249-429-11	CARBON	10K	5%	1/6W	
RV101 RV102	1-226-233-00 1-226-232-00	RES, ADJ, CAR RES, ADJ, CAR				
\$601 \$701 \$901 <u></u> ♠	1-570-489-11 1-570-489-11 .1-552-535-00	SWITCH, MICRO SWITCH, MICRO (E)SWITCH	(ARM.	REST)(PLAY)	6.1.1.1.1

ELECTRICAL PARTS

Description

Ref.No. Part No.

	SW102 1-554 SW103 1-554	-541-12 SWITCH, -541-12 SWITCH,	PUSH (1 KEY)(POWER) , KEY BOARD (START/STOP) , KEY BOARD (REPEAT) , KEY BOARD (SPEED)
	X101 1-567	-342-11 OSCILLA	TOR, CERAMIC
	ACCESSORY & F	PACKING MATERIAL	
	Part No.	Description	
Δ	-1-526-565-12 1-556-372-41	(PS-LX430.LX43	O(C) .LX431 .LX433)
	1-557-109-21	C (PS-LX430,LX43	ORD, CONNECTION (4 CORE) O(C),LX431,LX433)CORD, CONNECTION
	1-558-233-11	(PS-LX430,LX43	O(C),LX431,LX433)CORD
	1-558-649-11	(PS-LX430,LX43	(WITH CONNECTOR)(SIRCS) 4P O(C),LX431,LX433)CORD (WITH CONNECTOR) 3P
	3-701-630-00		O(C),LX431,LX433) BAG, POLYETHYLENE
	3-701-634-00 3-701-806-01	BAG, POLYETHYL ADAPTOR, 45RPM	ENE
	3-703-450-01 3-795-753-21 3-703-845-01	(PS-LX430,LX43 (PS-LX430,LX43 (US,Canadian).	O(C),LX433:US)INSTRUCTION 3)INSTRUCTION LABEL (N)(U/C), MAIN CAUTION
	3-765-235-11 3-765-235-21	(PS-LX431:AEP, (PS-LX430,LX43	UK,E)MANUAL, INSTRUCTION O(C),LX433:US,Canadian)
	3-765-235-31 3-765-235-41	(PS-LX430(C):C (PS-LX431:AEP)	MANUAL, INSTRUCTION anadian)MANUAL, INSTRUCTIONMANUAL, INSTRUCTION
	3-794-123-11 4-862-043-00 4-874-262-00 4-876-352-00 4-881-698-00	SHEET, PROTECT	O(C),LX431,LX433)GUIDE, RECORD ION O(C),LX431,LX433)
	4-990-536-01	/DC-1 V420 L V42	PLATE, PROTECTION
	4-889-536-01 4-889-540-02 4-889-537-01 4-889-541-02	(PS-LX431(N)). (PS-LX430.LX43	0(C),LX431,LX433)CUSHION (LEFT) CUSHION (LEFT) 0(C),LX431,LX433)CUSHION(RIGHT) CUSHION(RIGHT)
	4-889-538-01 4-889-544-01 4-903-422-00 *4-903-452-01	HOLDER, TURNTA (PS-LX431(N)). (PS-LX430,LX43) SPACER, CLUTCH	BLE SPACER O(C),LX433)HOLDER, ARM
	4-903-468-01 4-903-468-11 4-903-468-21 4-903-468-31	(PS-LX430) (PS-LX430(C)).	INDIVIDUAL CARTONINDIVIDUAL CARTONINDIVIDUAL CARTONINDIVIDUAL CARTON
	The compo	onents identified	Les composants identifiés par
	by shadir	ng and mark A are	une trame et une marque ⚠ sont

The components identified by shading and mark \underline{A} are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque A sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.